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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,642	03/20/2002	Takaya Sato	08292.045	7426

7590

06/26/2003

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EXAMINER

NGUYEN, JIMMY T

ART UNIT

PAPER NUMBER

3725

DATE MAILED: 06/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

N.K.

<b>Office Action Summary</b>	<b>Application No.</b> 10/088,642		<b>Applicant(s)</b> SATO ET AL.	
	<b>Examiner</b> Jimmy T Nguyen		<b>Art Unit</b> 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment filed on April 21, 2003 under 37 CFR 1.131 has been considered and an action on the merits follows.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "pair of backup rolls generating a pressing force onto each work roll" (claim 1) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1-4 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled

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in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, the specification does not support the “pair of backup rolls generating a pressing force onto each work roll”. It is suggested that the language of the claim should recite as follows: “a pair of back up rolls, wherein each of the backup rolls generates a pressing force onto each work roll” (see fig. 4).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding line 2 of claims 1-8, the recitation “rolling/pressing” is unclear. It is not clear whether the rolling apparatus is used for rolling and pressing an electrode structure, or it is used for rolling or pressing an electrode structure.

Regarding claims 2-4, line 2, it is not clear whether “an electrode structure” is the same electrode structure as claimed in the parent claim 1. It appears that a double inclusion is created.

Regarding claim 5, line 5, it is not clear whether “an electrode structure” is the same electrode structure as claimed in line 2.

Regarding claim 5, line 7, it is not clear what “the other work roll” referring to. Does it refer to the first work roll or the second work roll?

Regarding line 2 of claims 6-8, it is not clear whether "an electrode structure" is the same electrode structure as claimed in the parent claim 5.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-2 and 5-6, as best as can be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over ME (Matsushita Electric Ind. Co.) (JP 10-270296) in view of De Mol et al. (US 4,700,557).** ME discloses a rolling apparatus for rolling an electrode structure (9) comprising a pair of work rolls (10, 11). ME discloses a pressing force onto the surface of the roll. ME does not expressly disclose the pressing force is a pair of pressurized backup rolls. However, De Mol, in a similar rolling art, teaches a rolling apparatus for pressing a work piece comprising: a pair of work rolls (12); a pair of backup rolls (18) that each has a diameter larger than a diameter of the work roll; a pressuring device pressing the backup roll toward the work roll side (see col. 2, lines 8-15), and a drive unit rotating the work rolls (see col. 2, lines 5-7). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided ME with the type of rolling apparatus as taught by De Mol in order to improve controlling the shape of the pressing material (see col. 1, lines 46-47).

**Claims 3 and 7, as best as can be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over ME and De Mol et al., as applied to claims 1 and 5 above, further in view of Yoshida (JP 7-287465).** ME do not expressly disclose the type of layer on the surface

of the backup roll. However, Yoshida, in a related rolling art, teaches a backup roll that has an elastic layer on the outer periphery. It would have been obvious to one having ordinary skilled in the art at the time the invention was made to have provided ME's backup roll with an elastic layer as taught by Yoshida in order to prevent wearing of the outer surface of the backup roll and to prolong a service life (see abstract).

**Claims 4 and 8, as best as can be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over ME and De Mol et al., as applied to claims 1 and 5 above, further in view of Metcalfe (US 5,042,281).** ME discloses the rolling apparatus, ME do not expressly disclose the specific details (i.e., roll housing, roll axle..) of the apparatus. However, Metcalfe, in a related rolling art, teaches a rolling apparatus comprising: a work roll (22) having an axle mounted in a housing (124) and an opposite work roll (24) having an axle mounted in an opposite housing (126) (see figure 9). It would have been obvious to one having ordinary skilled in the art at the time the invention was made to have provided ME's apparatus with the type of structure as taught by Metcalfe in order to improve control of the pressure in the apparatus. With regards to a spacer positioned between the housings, ME, as modified by Metcalfe, disclose two separate housing, but ME do not disclose the use spacer between the housings for the adjustment purposes. However, the use of spacer is well known in the mechanical art and is a readily available hardware known to the skilled artisan for their intended purposes. Therefore, it would have been obvious to use spacer to make adjustment between the roll housings of ME' apparatus for the noted motivation.

***Response to Arguments***

Applicant's arguments filed April 21, 2003 have been fully considered but they are not persuasive.

Applicant argues that the back up rolls of De Mol '557 (col. 2, lines 8-15) are provided to simply adjust the pressure on the work rolls. With respect to Applicant's assertions, this argument is not found persuasive because col. 2, lines 8-15 of the De Mol patent does not disclose back up rolls are provided to simply adjust the pressure on the work rolls. De Mol discloses the back up rolls are provided to controllably apply pressure to the work roll (col. 2, lines 9-11).

Applicant argues that the De Mol patent and the present invention are in a different field of art. This argument is considered but not found persuasive. Claim 1 as written states, "...a current collecting material...", Examiner understands that a material able to collect a current (i.e. carry current) is a metallic material. Because, De Mol teaches pressing a metallic material between presser rolls, the prior art references are analogous.

With regard to the argument under the rejection under 35 U.S.C. 103, applicant argues that Yoshida (claims 3 and 7) and Metcalfe (claims 4 and 8) fail to remedy the deficiency of ME and De Mol et al., the argument is found non-persuasive because the rejections of ME in view of De Mol et al. are found sufficient as noted above.

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy T Nguyen whose telephone number is (703) 305-5304. The examiner can normally be reached on Mon-Thur 8:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen Ostrager can be reached on (703) 308-3136. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3579 for regular communications and (703) 305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

JTNguyen  
June 24, 2003



ALLEN OSTRAGER  
SUPERVISORY PATENT EXAMINER  
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